

PARAMETRIC OPTIMIZATION OF OPTICAL METROLOGY MODEL

ABSTRACT

The profile of an integrated circuit structure is determined by obtaining a measured metrology signal and a first simulated metrology signal, which has an associated profile model of the structure defined by a set of profile parameters. When the two signals match within a first termination criterion, at least one profile parameter is selected from the set of profile parameters. A value for the selected profile parameter is determined. A second simulated metrology signal having an associated profile model of the structure defined by a set of profile parameters with at least one profile parameter equal or close to the determined value for the selected profile parameter is obtained. When the measured and the second simulated metrology signals match within a second termination criterion, values for one or more remaining profile parameters are determined from the set of profile parameters associated with the second simulated metrology signal.